

GST 203: FEASIBILITY AND INVESTMENT DECISION MAKING

A business concept is a bridge between an idea and a business plan. It focuses one's thinking so that A ousmess concept is a prioge between an idea and a ousmess plan, it rocuses one's announg so that the entrepreneur can identify the specifics of his/her proposed venture. Converting an idea into a business concept requires thinking about how the product of salvice will be sold and who will buy it, the benefits of the product or service, how it is differentiated from similar ones, and methods of

Preparing a written concept statement helps unearth critical components of a venture and begins research into key factors that may be more thoroughly addressed in a business plan. As the business idea takes form as a concept statement, the entrepreneur can evaluate the business more effectively for

A clear business concept also enables the founder to succentilly describe the precise nature of the business to suppliers, customers, lenders, and resource cam members; an important skill for entreprensurial success. For example, it is not sufficient to say "I-want to start a management consulting company." This tells the listener little. But one can say "I plan to start a management consulting company that provides strategic planning services to mid-sized businesses in the Southeast. Each consulting team, tailored to meet the unique needs of the client, will provide assessment and planning services to help clients improve efficiency and institute processes for innovation and change, resulting in cost reductions and sales increases."

This version tells the listener much more than the first statement and helps the potential elient victualize the business and its offerings.

When describing his/her business idea, the entrepreneur should answer the following questions:

- n. What is my product/service?
- b. What does my product/service do?
- c. How is it different or better than other products/services?
- d. Who will buy the product/service?
- e. Why will they buy the product/service?
- f. How will the product/service be promoted and sold/offered?

Office the business concept statement changes during feasibility testing and business planning as the g. Who are my competitors? founder learns more about the market and potential profitability of the business. Eventually, nowever, the entrepreneur should be able to accurately describe the essence of the business to others in two or three sentences. In some cases, a single sentence may do.

Once the business concept statement is clearly defined, the more detailed work of business planning and implementation may begin.

Difference between Industry & Market Analysis

An industry exists to serve a market. If an industry becomes irrelevant to market demands, it fails. An industry is made up of a top tier of companies that produce and sell products and services to a target customer. A market is made up of individual consumers. They can be categorized by their buying habits -- that which attracts them to buy certain products rather than others.

Industry analysis attempts to interpret the overall relevance of a particular industry to the needs of its market. Investors use industry analysis to determine potential profits. An industry that is losing its dominance to a new technology, for example, is not a good investment growth prospect. Industry analysis also examines the internal forces in the industry such as manufacturing technology, materials sourcing and capacity to supply the demands of wholesale and retail distribution. Product differentiation among companies reveals the depth and breadth of the industry as a whole; minimal product differentiation indicates an industry at risk of consuming itself in pricing wars to attract customers. Competition among companies tends to keep an industry output relevant to its market because hot competition forces companies to be more aggressive in their market analysis, and production technology determines the cost of production. Technologically advanced companies are more able to control their costs and present their products at prices the consumer wants.

Market Analysis; Market analysis examines the market demand in relation to prices and product offerings, using consumer demographics and buying habits to identify trends. Market analysis and industry analysis are both used by investors and corporate managers in the projection of corporate financial performance. The market analyst's job is to project potential problems, such as creating a product that no one wants to buy, and redirect company efforts toward products that will do better in the marketplace. Industry-leading companies use market analysis in planning the details of product lines that have a better chance of success because they more directly satisfy market demands. A market analyst also tracks how prices of products rise and fall according to demand and follow product production volume, a factor that can limit profit margins.

FINANCIAL ANALYSIS (CASH FLOW)

Cash flow is exactly what its name implies: the anticipation of cash as it flows into and out of the company. The cash flow statement is a business document which blends the balance sheet and income statement together in order to display how cash has come into and gone out of your business.

To have a full picture of a business' financial performance, the income statement, the balance sheet and the cash flow statement must be carefully examined.

The income statement shows the sales and profitability of your business for a specific period of time, while the balance sheet gives you a snapshot of your overall financial condition at a point in time.

Why cash flow matters?

- 1. The cash flow statement is a tool to assist in financial decision making
- 2. One of the reasons why the cash flow statement is so helpful is that companies record transactions when they occur.
- 3. The cash flow statement determines whether a company has a "durable competitive advantage.4. It as a means to a kind of self-examination, an honest assessment of your financial health can reveal serious red flags in your business and it might even save it.

5. The information contained in the cash flow statement can give you a clear indication of your liquidity.

How to read the cash flow

The cash flow statement is divided into segments. In order to outline cash flows, three major activities of all companies: operations, investing and financing must be carefully studied.

The information on cash flows from operating shows how much money you are generating from regular operations - from the basic fundamental production and sales of goods and/or services.

It starts with the net income reported on the income statement, then adds back non-cash expenses (such as depreciation and provisions the company made for doubtful accounts) and adjusts for changes to current assets and current liabilities. For example, a sale made on credit does not affect cash, but it would increase sales (and therefore net income) and would create an increase in accounts receivable. The related increase in accounts receivable is deducted from net income to show the actual cash from operations.

The section on eash flows from financing activities may show that equity was issued to raise cash or to make acquisitions. While raising cash through equity may be a good thing, it's not money that your business has generated on its own, and your business may not survive long if it doesn't generate cash on its own. This section on financing will also show whether stock issuances are outpacing or lagging stock repurchases, an issue of keen interest to your shareholders.

Are you currently investing cash in the future growth of the business through new facilities or other capital expenditures? Are you selling assets to bring in more cash? Hopefully, your answers must be line with your overall strategic goals as a company.

Finally, metrics and ratios based on information contained in the cash flow statement can give you a clear indication of your liquidity. And it is calculated by subtracting capital expenditures from net cash from operations.

Record keeping and cash flow in small scale business

A successful business rests on sound record keeping practices and solid cash flow. Without good records it is impossible to determine the financial condition or profitability of a business. Therefore, the small business owner should be familiar and recognize the importance of proper record keeping the small business owner should be familiar and recognize the importance of proper record keeping planning.

Many small business owners are very knowledgeable about their accounting procedures and quite adopt in analyzing their financial records and statements.

Reasons for financial record keeping

- 1 .Complete and accurate financial record keeping is crucial to your business success.
- 2. Good records provide the financial data that help you operate more efficiently, thus increasing your profitability.
- 3. Accurate and complete records enable you, and your accountant, to identify all your business assets, liabilities, income and expenses. That information, when compared to appropriate industry averages, helps you pinpoint both the strong and weak phases of your business operations.

- 4. Good records are essential for the preparation of current financial statements, such as the income statement (profit and loss) and cash-flow projection. These statements, in turn, are critical for maintaining good relations with your banker. They also present a complete picture of your total business operation, which will benefit you as well.
- 5. Good records are critical at tax time. Poor records could cause you to underpay or overpay your taxes. In addition, good records are essential during an IRS audit, if you hope to answer questions accurately and to the satisfaction of the IRS.

Here are some of the questions that might be considered in assessing your record keeping;

- How much income are you generating now and how much income can you expect to generate in the future?
- How much eash is tied up in accounts receivable (and thus not available to you) and for how long?
- How much do you owe for merchandise? Rent? Utilities? Equipment?
- What are your expenses, including payroll, payroll taxes, merchandise, advertising, equipment and facilities maintenance, and benefit plans for yourself and employees (such as health insurance, retirement, etc.)?
- How much eash do you have on hand? How much eash is tied up in inventory? What is your actual working-capital budget?
- How frequently do you turn over your inventory? Which of your product lines, departments or services are making a profit, which are breaking even, and which are financial drains?
- What is your gross profit? What is your net profit? How do all of the financial data listed above compare with last year - or last quarter? How do they compare with the projections in your business plan?
- How do all the financial data compare with those of your competitors? With those of the industry?

Cash flow planning

Small business owners must prepare for all future events and market changes. Failure to properly plan cash flow is one of the leading causes for small business failures.

Experience has shown that many small business owners lack an understanding of basic accounting principles. Knowing the basics will help you better manage your cash flow.

The operating cycle is the system through which cash flows, from the purchase of inventory through the collection of accounts receivable. It measures the flow of assets into cash. If you are operating cycle from the purchase of supplies through the collection of receivables totals 180 days, this is the amount of time which you must finance.

Since capital providers, such as lenders, require a return on their investment, this financing will, of course, bear interest. The longer your operating cycle, the higher your financing cost will be. It is important to analyze your operating cycle and forecast your cash needs to minimize the amount which must be financed without running short of cash.

Cash flow analysis should show whether your daily operations generate enough cash to meet your obligations and how major outflows of cash to pay your obligations relate to major inflows of cash from sales.

As a result, you can tell if inflows and outflows from your operation combine to result in a positive cash flow or in a net drain. Any significant changes over time will also appear. Understanding this will lead to better control of your cash flows and will allow adequate time to plan and prepare for the

growth of your business.

It is best to have enough cash on hand each month to pay the cash obligations of the following month. A monthly cash-flow projection helps to identify and eliminate deficiencies or surpluses in cash and to compare actual figures to past months.

When cash-flow deficiencies are found, business financial plans must be aftered to provide more cash. When excess cash is revealed, it might indicate excessive borrowing or idle money that could be invested. The objective is to develop a plan that will provide a well-balanced cash flow.

How to maintain positive cash flow

To achieve a positive cash flow, you must have a sound plan.

- A. Collecting receivables: Actively manage accounts receivable and quickly collect overdue accounts. Revenues are lost when a firm's collection policies are too passive. The longer your customer's balance remains unpaid, the less likely it is that you will receive full payment. Conversely, the faster you collect on your receivables, the shorter your operating cycle will be.
- B. Tightening credit requirements: As credit and terms become more stringent, more customers must pay cash for their purchases, thereby increasing the cash on hand and reducing uncorrectable accounts. While tightening credit is helpful in the short run, it may not be advantageous in the long run. Looser credit allows more customers the opportunity to purchase your products or services. Any consequent increase in sales should be measured against a possible increase in uncorrectable accounts.
- C. Adjusting the of products price: Many small businesses fail to make a profit because they erroneously price their products or services. Pricing is the critical element in achieving a profit and maintaining positive cash flow. Before setting your prices, you must understand your product's market, distribution costs and competition. Remember, the marketplace responds rapidly to technological advances and international competition. Monitor all factors that affect pricing on a regular basis and adjust as necessary.
- D. Taking out short-term loans: Loans from various financial institutions are often necessary for covering cash-flow problems. Revolving credit lines and equity loans are common types of credit used in this situation.
- D. Increasing your sales: Increased sales would appear to increase cash flow. However, if large portions of your sales are made on credit, when sales increase, your accounts receivable increase, not your cash. Meanwhile, inventory is depleted and must be replaced. Because receivables usually will not be collected until, say, 30 days after sales, a substantial increase in sales can quickly deplete your firm's cash reserves. A computer can facilitate tracking this critical data, as well as speed the time required to consider "what if" scenarios.
- E. Managing your expenses: Watch your expenses carefully. It makes sense to pay early if your suppliers offer a discount for early payment. If no discount exist and the supplier allows you 30 days to pay, take advantage of the 30 days and do not pay in 5. However, beware of penalties for late payment and the potential impact on your credit rating. You should monitor your expenses to make certain they are necessary and reasonable in amount.
- F. Your cash reserve: You should always keep enough reserve cash on hand to cover expenses and as an added cushion for security. However, it is unwise to keep more money on hand than is necessary. Excess cash should be invested in an accessible, interest-bearing, low-risk account, such as a savings

account, short-term certificate of deposit or Treasury bill. Keeping excess cash on hand limits both

G. Cash flow projections: Cash flow projections, as well as good accounting records, are important tools for a small business. They will help answer important questions about the company's financial future and provide direction. The failure to make proper projections, even if only informally, reduces

Basic record keeping system

Good record keeping is time-consuming and yet essential for your success. A basic record keeping system, whether on paper or an off-the-shelf computer software program, should be simple to use, easy to understand, reliable, accurate, and consistent, designed to provide information on a timely

- Accounts receivable records
- Accounts payable records
- Payroll records
- Petty cash records
- Inventory records.
- 1. Record keeping with your computer: The computer makes it easy to develop cash-flow projections and many other useful financial-planning tools. A good financial-management package will enable you to review projected inflows and outflows of cash from month to month or year to year.
- 2. Paper-Based: Sometimes, the simplest system is the best, especially when first starting out. For
- 1. File Folder: A file folder holds loose papers together for organization and protection. File folders can easily be purchased at office supply stores. Label file folders based on what is inside by writing
- 11. rianging Folder: Use hanging folders to group several file folders together, for example, a hanging folder might be labeled "Clients" to contain a number of individual client folders. Cabinet Storage: Hanging folders are often stored in a filing cabinet. Lock the cabinet when not in
- 111. Accordion Folder: An accordion folder opens like an accordion on top to reveal compartments for storing documents. Each compartment can be labeled. Accordion files are designed to store

Product Analysis

A product analysis is a document which contains a proper and thorough outline of the merits and drawbacks of a particular product up for review. Such an analysis is conducted by a company, an external agency, investors or any individual or group with a vested interest in the performance of the product. It may be carried out before or after the release of the product and must be framed

Product Analysis Template

Before starting a new business a business man conduct an analysis about product of competitor that are used and sale out in the market and the format which is used to prepare is called product analysis remplate. What type of ingredient used to prepare a product, and find the quality to compete in the market? Product analysis template helped to find out qualities, and weakness of market product. Than new product is dispatch in market with the new feature and benefit along with the more useful life that

help to capture the existing market. Product analysis highlighted all the point that is focused to

Sample Product Analysis Example:

The following is a product analysis document prepared by NIFEM Foods and Beverages Pvt. Ltd. for its product Herbal Ice Tea:

Date of product analysis: 23rd June 2012

Purpose of product analysis:

prepare new product.

To ensure that the product is quality tested before being launched in the market on the 23rd of August 2012.

To outline its flaws and areas where there is a scope for improvement.

Nature of product: The product in question has been in development since 2011. It is summer beverage targeted at youngsters and college campuses, designed with herbal ingredients like mint and basil, and it contains no added preservatives.

Product scores on:

The product is set to make an instant splash in the F and B market due to the brand name of the company and also due to first player advantages. Since there are no comparable Ice Tea beverages in the market currently, our product is hoped to create a buzz.

The product is priced attractively at 5\$ per bottle making it affordable for the student. The product is completely prepared from organic ingredients which make it a substance of choice for the present-day health conscious youngsters.

LIQUID SOAP MAKING

Liquid Soap Ingredients

Like hot and cold process soap, there is a lye component and an oil component.

The lye component is a bit different. Sodium hydroxide is used to make hard bar soap while potassium hydroxide is used to make liquid soap. Potassium hydroxide is harder to find and comes in flakes, not beads. The flakes are easier to work with, but are still caustic, so gloves and protective eyewear must be used. You will also need a small amount of borax. The other ingredients include, water, coconut oil, olive oil, essential oils and colours. You can source all of these ingredients organically except the potassium hydroxide.

Note: Keep in mind that all of the potassium hydroxide is eliminated during the soap making process through a reaction called saponification. It is no longer caustic at this point.

Equipment .

Like hot process soap making, you will need a slow cooker, a stick blender, quart jar (I use a wide mouth jar) and plastic stirring spoons. Since this recipe is measured in ounces, you will also need a kitchen scale. Additional equipment includes a plastic potato-masher and a large jar for the resting

period. You may also need a thermometer, and a ladle to move your soap. You will also need additional water for diluting the soap paste and mixing with the borax for neutralizing the soap.

Recipe for Liquid Soap

*16.5 ounces olive oil (find unrefined organic olive oil here)

- 7 ounces coconut oil (find unrefined organic coconut oil here)
- 5.5 ounces potassium hydroxide (find it here)
- 16.5 ounces distilled or filtered water (find the best water filtration systems here)
- 40 ounces distilled or filtered water
- 3 ounces borax (find it here)
- 6 ounces distilled or filtered water

.colour which is optional Essential oils, optional (find 100% pure essential oils here)

The Process

- Weigh your olive oil and coconut oil and place them into the slow cooker. Turn on low 1.
- In the quart jar, weigh your water. Slowly add the weighed potassium hydroxide, stirring gently as its added. Don't be surprised at any sounds or reactions you may hear. (Potassium hydroxide reacts slightly differently than sodium hydroxide in water.)
- When the potassium hydroxide is all mixed in and the solution appears clear, add your water/potassium hydroxide mixture to the oils. Don't worry about the temperature.
- Carefully stir by hand for 5 minutes to be sure all the oils come into contact with all of the porassium hydroxide.
- After 5 minutes, begin stirring with the stick blender. It could take up to 30 minutes to achieve "trace." (In soap making, trace is normally when the mixture is thick like vanilla pudding, but with potassium hydroxide trace might look more like applesauce.)
- 6. The mixture might look like it's going to separate, but don't stop until you have trace.
- Cook in the slow cooker for about 30 minutes with the lid on. Check after 30 minutes. If it's 7. separated, stir it back in.
- Check every 30 minutes for 3-4 hours.

During the 3-4 hour cooking stage, your soap mixture will go through several stages. They will look like this:

- Trace thick pudding to applesauce
- Custard-like with small bubbles
- Watery mashed potatoes
- Taity

- Chunky to creamy petroleum jelly
- Translucent petroleum jelly

Each stage could take 30 minutes or longer.

The Rest Period

Now you can ladle your soap into a large jar. I use a gallon size glass jar for this. Secure the lid and leave it for a week or so. This allows any solid particles to settle to the bottom. When your soap is clear, pour it into smaller bottles, label and enjoy! Just be sure not to disturb the sediment on the bottom or you'll have to wait for it to settle again.

EIGHT SIMPLE STEPS FOR NEW PRODUCT DEVELOPMENT

The steps involved:

1. Idea Generation

The development of a product will start with the concept. The rest of the process will ensure that ideas are tested for their viability, so in the beginning all ideas are good ideas (To a certain extent!)

Ideas can, and will come, from many different directions. The best place to start is with a SWOT analysis, (Strengths, Weaknesses, Opportunities and Threats), which incorporates current market trends. This could be:

- Under-taking market research
- Listening to suggestions from your target audience including feedback on your current products' strengths and weaknesses.
- Encouraging suggestions from employees and partners
- Looking at your competitor's successes and failures

2. Idea Screening

This step is crucial to ensure that unsuitable ideas, for whatever reason, are rejected as soon as possible. Ideas need to be considered objectively, ideally by a group or committee.

Specific screening criteria need to be set for this stage, looking at affordability and market potential. These questions need to be considered carefully, to avoid product failure after considerable investment down the line.

3. Concept Development & Testing

You need to ask the people that matter - your customers. Using a small group of your true customer base - those that convert - the idea need to be tested to see their reaction. The idea should now be a concept, with enough in-depth information that the consumer can visualise it.

Do they understand the concept?

other

This stage gives you a chance to develop the concept further, considering their feedback, but also to start thinking about what your marketing message will be.

4. Business Analysis Once the concept has been tested and finalised, a business case needs to be put together to assess whether the new product/service will be profitable. This should include a detailed marketing strategy, highlighting the target market, product positioning and the marketing mix that will be used.

This analysis needs to include: whether there is a demand for the product, a full appraisal of the costs, competition and identification of a break-even point.

5. Product Development

If the new product is approved, it will be passed to the technical and marketing development stage. This is when a prototype or a limited production model will be created. This means you can investigate exact design & specifications and any manufacturing methods, but also gives something tangible for consumer testing, for feedback on specifics like look, feel and packaging for example.

6. Test Marketing

Test marketing (or market testing) is different to concept or consumer testing, in that it introduces the prototype product following the proposed marketing plan as whole rather than individual elements. This process is required to validate the whole concept and is used for further refinement of all elements, from product to marketing message.

7. Commercialisation

When the concept has been developed and tested, final decisions need to be made to move the product to its launch into the market. Pricing and marketing plans need to be finalised and the sales teams and distribution briefed, so that the product and company is ready for the final stage.

8. Launch

A detailed launch plan is needed for this stage to run smoothly and to have maximum impact. It should include decisions surrounding when and where to launch to target your primary consumer group. Finally in order to learn from any mistakes made, a review of the market performance is needed to access the success of the project.

New product development can be made much simpler and focused, with a higher likelihood of success, by following the steps above

FISH FARMING

Raising fish, also known as aquaculture, can be done on a small scale in backyard ponds, pools, or tanks. Needs for raising fish for your self-sufficient and survival food include the best fish breeds. equipment, and care? Fish are relatively easy animals to farm. They need less space per animal than

ner kinds of livestock. Aquaculture can be done in more places. Fish and fish protein are in great demand worldwide, and the need for more fish production is speedily growing.

Getting started with aquaculture requires a good body of water. Your lake must contain plenty of weeds, both in the water and around it. These plants will provide protection, food and shade for your fish. Also many insects, small fish and other critters that fish devour on must have vegetation for their life-cycle. Once the water, plants and foodstuff sources have been established, it is time to introduce

Raising Fish could be in a Farm Pond, in Tanks and Aquarium Heaters. Typical fish grown by fish farms include salmon, catfish, tilapia, cod, carp, trout and perch. The trout is the finest fish for a novice to start up with. It's among the strongest of the fish raised on a fish farm and they have got an excellent market value.

The next stage is to get some ova. Fish eggs need gentle handling and care if they are to prevail. Eyed ova are the easiest and more dependable way, especially for the first-timer. Many fish farmers start with ova that are already fertilized. These can be bought quite readily and arrive when they are almost ready to hatc. Newborn fish are called "alevins." At first, these tiny fish don't need any food. They feed off of their yolk-sac and will begin to feed on real food in about six weeks, later feed on processed food meal at least four times daily. As they grow and become known as "fry", they required more varied, natural diet that includes insects, small fish & crustaceans in order to grow big and healthy. Processed food can add to a natural diet, but it's no alternative.

After a few months, the fish will be ready to move into their new home. Some aqua culturists breed their fish to this point in rearing ponds away from the main pond and the fish will need to be moved. Others use hatching trays in the large pond and the fish are allowed to swim out when they are large enough. They should be thinned out as they grow. Remove the small and weak ones, and put them in another area. Keeping the fish in the water with larger fish might mean they will be eaten one another. With just a medium size pond, you could even begin your own hatchery, or sell fresh fish to shops and restaurants. Also keep in mind that variety in your ponds is essential to a healthy fish population. Be careful about what you introduce. Don't over-stock your pond with any one kind of fish for a healthy balance

METHODS OF RAISING FISH

In commercial aquaculture, there are two general strategies:

- a) lusensive and
- (b) Extensive.

Extensive aquaculture is space dependent, and utilizes large ponds.

Intensive aquaculture utilizes tanks and requires a great deal of management to produce a lot of product in a small space.

Raising fish at home can follow either of these strategies, but will probably be lower production than commercial systems in order to reduce the amount of equipment and the amount of management that goes into it.

Hatching trays can be constructed of perforated zinc fairly easily. Make them 1½ inches deep, and the ova will hatch out well in them. The size of hatching tray you will require will depend on the size of box you will suspend them in.

When in operation in the water, the trays are loaded with ova and suspended in the boxes. They have to be positioned so that a nice current of water can move through them. Before you put ova into these boxes, you should allow them to sit in the pond. This will ensure that nothing contaminates the area when the eggs are introduced.

Young fish and eggs need to be protected from the sun and predatory animals. That's why you'll need to keep your rearing ponds near shady trees. It's also quite important to have as much tall grass and weeds as possible growing around the banks.

Netting can be put over rearing ponds to keep hungry birds out. But you will have to keep a look out over your brood because Birds are smart. The rearing boxes need to already be resting in the ponds for several weeks before the ova are ready. The edges of the boxes will be about six inches above the water. The trays are hung inside the rearing boxes with the water level coming up to the top edge. This is where your ova will be calling home until they hatch and are strong enough to swim out into the rearing box.

The ova will need to be carefully washed before they can be added to the hatching tray. The technique for cleaning the ova is quite simple. A large container is filled with water and ova, the water is drained off and clean water added. This process is repeated until the water runs clear.

After cleaning, the ova can be placed on the hatching trays. This can be done by tenderly ladling the ova, a few at a time, out of the cleaning container. Hold the ladle very close to the tray and empty the ova as gently as possible. Never pour the ova from a height, the impact will certainly kill them.

Ova will hatch at a far higher rate if they are distributed into a single layer. This is a very delicate procedure and requires a gentle touch. A feather is just the tool for the job. Gently running the feather over the ova will spread them out with minimal damage.

Despite taking all the necessary precautions, some of the ova will die. They can be easily identified by their white or opaque colour. Dead eggs must be removed from the hatching trays immediately. Leaving them in the trays can lead to fungus growth that can damage your entire stock.

A natural way to clear out dead ova is to introduce fresh-water shrimps to your hatching trays. They will only feast on the dead ova and will not damage live ones. These mini aquaculture housekeepers will clear out animal and plant debris in the water too.

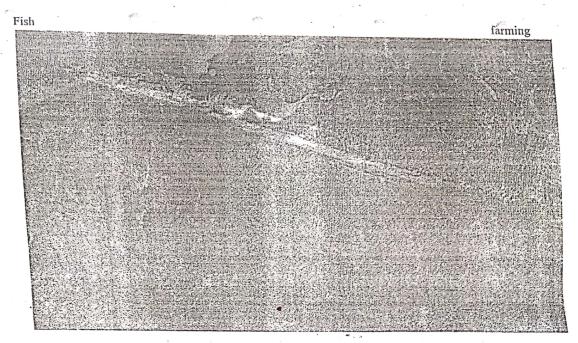
Keeping a lid over the rearing boxes will also help to protect ova from fungus growth. Fungus loves light and a lid will cut off the light and keep growth to a minimum. A lid is also an excellent way to protect ova and young fish from predators.

In a short time, the first fish will begin to hatch. These young fish, also known as an alevin, will have a large bag on their underside. This is the yolk sac. The fish will require no food to start with. They will feed off of their sac for the next month and a half or so.

Eventually, the do it yourself fish farmer will see that some of his alevins have begun to move away from the pack at the bottom of the hatching trays. They'll start to swim up towards the current. Now is

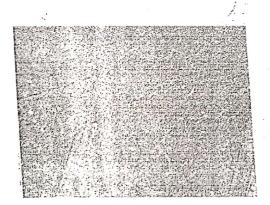


the time to start feeding them finely processed meals. Their yolk sacs are almost gone now and they are moving on to the next stage of their lives.



Raising Fish for Survival Food

. Due to the overwhelming evidence of chemicals and impurities in foreign raised fish, raising fish at home is a safer alternative than buying fish from the



Commercial aquaculture and fish farm.



Parm ponds are an ideal place to raise fish for food



Raising fish in a backyard pond for survival food,

If you want to ramp up production, they can be fed a commercial diet that meets your feeding philosophy. For example, there are some fine organic fish feeds available or choose a less managed approach and just let your fish eat what your pond produces. A laissez faire strategy will require a

lighter stocking density and a slower grow out but will produce virtually free food, Raising Fish a: Tanks



Home fish faming in tanks,

Blue Tilapia a good breed for backyard

Feasibility Study

A Feasibility Study is a formal project document that shows results of the analysis, research and evaluation of a proposed project and determines if this project is technically feasible, cost-effective and profitable. The primary goal of feasibility study is to assess and prove the economic and technical viability of the business idea. A project feasibility study allows exploring and analysing business opportunities and making a strategic decision on the necessity to initiate the project. For each project passing through the Initiation Phase, a feasibility study should be developed in order for investors to study can give you the right answer before you spend money, time and resources on an idea that is not viable. It must therefore be conducted with an objective, unbiased approach to provide information ensure that their project is technically feasible, cost-effective and profitable. A thorough feasibility upon which decisions can be based.

Feasibility Study Methods

Whether a feasibility study last for six months of six days, it should follow a four-step listed below.

Steps involved in Feasibility study

paschools, and government agencies, a feasibility study could take months or even years of work in conjunction with outside consultants. On the other hand, a small business with the right connections and resources can perform a feasibility study over the course for few days. Regardless of the timeframe involved, the project manager in charge of the feasibility study must remain impartial as he Feasibility studies can take on different forms, depending on their contexts. In large enterprises, or she handles four critical tasks:

Examine the Market

The first step to an effective feasibility study method involves a critical analysis of the competitive landscape for a product or service. Many first-time entrepreneurs make the mistake of assuming that or attention can be viewed as competition. The fensibility study should paint a realistic picture of the their product has no competition. In reality, any other way in which a customer allocates money, time, likelihood that enough customers will be satisfied to result in a sustainable offering.

Review Technical Requirements

successful project into the proper context. In many cases, a study can help determine whether the Understanding the needs of the marketplace does not always guarantee the ability to meet customers? expectations. Including this analysis in the feasibility study method puts the overall requirements for a project spouses with require more resources internally or whether an outside vendor or partnership can handle the tasks more effectively.

Explore the Business Model

the long-term viability of the overall business model. This feasibility study method relies heavily on Having assessed the current market need and a team's ability to execute, a feasibility study can look at tools like scenario planning to ensure long term success. Project managers can discover whether the business model actually offers enough profit potential to make the initiative worthwhile. Likewise, study administrators can examine whether the new product or service under consideration requires such a significant change as to make it untenable within a business.

Look for an Except Route is a dirty word among many venture capital firms. Investors like to know that they will make a profit, and they want to have a strong idea about when they can cash the check. Commen fersibility may be required. When there is little or no brood being raised in the colony, the drones may b_{θ} destroyed, there about 300 to 500 drones in a colony.

The female bees are two kinds. In each colony there is usually only one queen. The queen is the only fully developed female. She lays all the fertile eggs and she's called the "mother" of the bees. If she lays between 1,500 to 3,000 eggs a day, she is a good queen. The other female bees in the colony are workers. They exist in large number up to several thousands. They may be between 60,000 and 80,000 workers in a colony's population. These workers are females whose ovaries do not develop but their bodies have been adapted to perform different works in maintaining the colony. The eggs laid by worker is not fertile and hatch into drones. Thus, the worker bee is an imperfect female.

REQUIREMENTS OF BEES

- Flower/food (nectar, fruits juice and pollen)
- 2. Water
- 3. Home

FOOD OF HONEY BEE

Honey bees eat nectar, fruit juices and pollen from flowers. Nectar and juice provides carbohydrates needs of bees while pollen provides the protein parts of the diet. The queen of the bees is usually fed with pollen and nectar against the scarcity (dearth period).

Nectar is stored as honey. It is therefore important for the bee keeper to know how to only harvest the 'surplus' honey above the bees requirement. If the beekeeper harvest all the honey from the colony leaving none for the bees to feed on, the bees will die of starvation or migrate from the colony. Bees also need water for drinking and cooling the hives.

When inviting wild swarm to colonize your hive, you need to fee them with sugar syrup in one to three days

There are many different types of bees, but we are only concerned with bees that makes honey which are called honey bees. There are also different species (kinds) of honey bees around the World. The type of honey bee found in central and east Africa are called APIS MELLIFERA-SCUTELLATA.

CHARACTERISTIC OF HONEY BEES

The major characteristic of honey bees include the following:

- SWARMING (POPULATION CONTROL)
- ORGANISATION (QUEEN, WORKER AND DRONE CASTER)
- MIGRATION
- * COMMUNICATION
- TERRITORIAL DEFENCE SYSTEM
- TERMOREGULATION-FARMING
- DIVISION OF LABOUR

EFFICIENT USES OF RESOURCES

- 1. High sense of sanitation
- 2. Causes of swarming
- 3. Lack of space for the brood nest or for the queen to lay eggs
- 4. Lack of storage room for honey
- Insufficient ventilation
- 6. High temperature or very low temperature
- 7. Crowding the brood nest.
- 8. Reduced transmission of queen substances due to old age (pheromon)

SWARMING CONTROL MEASURES

- A. Remove combs near the brood nest and replace with empty combs
- 8. Add empty combs
- C. Provide adequate shed for hives
- D. Provide enough ventilation
- E. Make enough water available for the honey bees
- F. Always observed the brood chamber for new queen cell
- G. Re-queen at least every two years

USES OF HONEY (MEDICAL VALUE)

- AS FOOD: A good source of protein, carbohydrate and mineral sourse.
- It heal wounds, boil and whitlow
- It clear cough, heal diabetes
- It relief cold and catarrh
- · For treating arthritis
- It clears soft throat
- Use for treating burns
- For the preservation of food eg meat, fish
- It improve eye sight
- It aid digestion of food and clears conception
- It services the heart and other internal organs.

USES OF BEE WAX

- For softing leather and making polishes in shoe industries
- For waxing clothing materials in textile
- For candle making and crayon
- For making creams and soft in cosmetic industries
- For ointment and furniture's polish
- In art, bee wax is use for muddling and batik
- ullet It is use as a temporary tooth filler in dentistry
- It is use in the production of wax foundation for bees

PEST AND DISEASE OF BEES

- ❖ LIZARDS
- · BIRDS
- · TOAD
- * TSETSE FLIES
- * DRAGON FLIES
- ☆ WAX MOTH
- * ANT

their food sources within their vicinity at least 2 km while bees can fly many kilometers to look for their food.

THE BEE COLONY

Honey bees live in a home of wax comb. The wax comb will be built by them (workers). These sixsided wall cells are very strong and house the broad (immature bees) during development and provided strong space for honey and pollen.

THE DRONES

The drones are larger and fatter than the queen or the workers. Their body are not as long as the queens. He does not have legs fit to carry pollen and he is unable to produce wax. He has no stinger to defend himself.

THE WORKERS

There are 5,000 to 75,000 workers bees in a colony. They built the entire house and field work. They go out to bring in water, pollen, nectar and propolis (bee glue), some build the wax comb, some nurse the young bees and control the temperature of the hive. It takes 21 days for a worker to grow from egg into adult. The workers have the stinger which when it stings, the stingers (venom) remain behind and the bee dies.

- 1. The dearth season April to June
- 2. Build-up season June to August
- 3. Nectar-flow season September to November
- 4. Honey-flow season Nov/Dec to Feb/March

ORGANISATION OF HONEY BEE COLONY

CASTES: A colony of bees consists of A queen, which is normally the only breeding female in the colony. Large number of female worker bees, typically 30,000-50,000 in number a number of males drone, ranging from thousands in a strong hive in spring, to very few during dearth or cold season.

In a bee colony, there are male and female bees. The male bee is called the drope, while the female is called the worker. A number of drones are reared and tolerated in a colony where their presence



When all the bees in a colony move from one place to another it is called migration. The honey bees called APIS-MELLIFEA-ADANSONII are likely to migrate for the following reasons:

- 1. Lack of food
- 2. Predation or devouring enemy like lizard, toad, bird etc
- 3. Management of the honey bees with other variety
- 4. Disturbance by human fire

All these bees in a colony may leave their nest suddenly or within a few day and carry honey along with them during departure.

MATING; IMPREGNATING THE QUEEN

Mating take place In flight and take it place five days after the queen images from the brood ceil. The young queen may be meted by several drone on successful meeting flight. Mating takes place only once in the queen life period the queen lay both fertilized egg. The fertilized eggs become male

CONDITIONS THAT INFURIATE (ANNOYED) BEES REACT AGGRESSIVELY TO THE FOLLOWING

- On natural odours like that of perfume, alcohol, sweat.
- Excessive disturbance and noise
- Black and red colours (bees like white and brown colours).

HIVE PRODUCT

- · HONEY
- * BEE WAX
- * ROYAL JELLY(BEES MILK)
- * PROPOLIS (BEE GLUE)
- . BEE VENOM OR APITOSIN
- · BEE POLING (BEE BREAD)
- QUEEN AND SWARM PRODUCTION
- ❖ IMPROVE GROPING THROUGH POLLINATION

Does the person possess the expected skills?

Does the person have the passion for the business?

Does the person demonstrate the required strength in the business'

PROCESSING OF LOCUST BEAN

Processing of locust bean fruits to food condiment, involves different unit operations after harvesting, such unit operations include depodding, removal of the yellowish pulp to produce locust bean seeds. Other processing operations are cleaning, boiling, de-hulling, washing, recooking, and then fermentation to produce the food condiment which is used as soup seasoning/spices (flavoring agent etc)

Economic importance in the processing of locust beans; It is a good source of nutrient, highly acceptable by the customers with good price and lastly serves as employment opportunities for people which can be in small or large scale

- 1. Depodding of the locust bean fruits are mostly done by hand by the processors, though it has been concluded that threshing machine used for cowpea could be used for removing the locust bean seeds coated with yellowish pulp from the pod.
- 2. The seeds of the locust bean are embedded in a yellowish pulpy material and seeds needed to be separated from this yellowish pulpy material before it can be further processed into fermented locust bean (Akande et al. 2269)

The separations are either done by drying the pulp or done by washing it in water to remove

- 3. Cleaning of the locust bean seeds which have to do with removal of any foreign materials prior to further processing. It is still done manually by use of wind to winnow it or washing
- 4. Cooking of locust bean seeds; the bean is encased in a hard, tough and relatively thick coat that has semi permeable characteristics. Easy movement of water through the coat is restricted. The adhesive strength that binds the coat to the seed is relatively high (Aniyi, 2004). Hence cooking is necessary to soften the firmly attached seed coat for easy dehulling. Cooking is done in a locally made aluminum cast-iron pot using fire wood as source of heat. This unit operation takes 24 h, which can be estimated to 50% of time used in processing of locust bean fruits to food condiment.
- 5. Dehulling occurs when firmly attached seeds coats which has been sofiened during cooking is removed for fermentation process. This unit operation is traditionally carried out either by action of abrasion of the cooked locust bean seeds and sea sand using hand or feet,

study methods include an analysis of potential exit strategies, especially for investors and other stakeholders that may want to move on. Study leaders can investigate how a project will evolve over

In planning on conducting a feasibility study, one will need to include the following important

- The Project Scope which is used to define the business problem and/or opportunity to be addressed. The old adage, "The problem well stated is half solved," is very apropos. The scope should be definitive and to the point; rambling narrative serves no purpose and can actually confuse project participants. It is also necessary to define the parts of the business affected either directly or indirectly, including project participants and end-user areas affected by the project.
- The Current Analysis is used to define and understand the current method of implementation, such as a system, a product, etc. From this analysis, it is not uncommon to discover there is actually nothing wrong with the current system or product other than some misunderstandings regarding it or perhaps it needs some simple modifications as opposed to a major overhaul. Also, the strengths and weaknesses of the current approach are identified (pros and cons). In addition, there may very well be elements of the current system or product that may be used in its successor thus saving time and
- The requirements: This component represents two groups of requirements, including technical requirements and organizational requirements. If there is a potential market and demand for the product or service then you need to identify what technical and resource requirements are needed for the new venture. You will need to define your requirements depending on the objective of your project. Project managers that understate the physical and fiscal resources required for a new product or service often end up with failed projects or unfulfilled promises.
- The Approach represents the recommended solution or course of action to satisfy the requirements. Here, various alternatives are considered along with an explanation as to why theprefers selected. In terms of design related projects, it is here where whole rough designs (e.g., "renderings") are developed in order to determine viability. It is also at this point where the use of existing
- 5. Evaluation: Examines the cost effectiveness of the selected approach and the estimated total cost of the project. Other alternatives will also be estimated for comparison purposes. After the total cost of the project has been calculated, an evaluation and cost summary will be prepared to include a
- Review:Finally, all the above elements will be assembled into a feasibility study and a formal review will be conducted. The review will be used verify the accuracy of the feasibility study and to make a project decision. At this stage, you can approve, reject or even revise the study for making a decision. If the feasibility study is approved, make sure that all the involved parties sign the docume

Advantages of feasibility study

Effective feasibility studies can do more than just help executives choose which projects but also managers involved in a feasibility study can actually use much of the same data to shape the project planning process.

1. Understanding Demand; Feasibility studies always analyze whether a real demand exists for product or a service.

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CAPPED BROOD: Cells closed by a thin layers of wax and pollen under which mature larvae change

CELLS: the little hexagonal sections on both sides of the comb containing brood, pollen or honey.

DRONES: the male bees which develop for unfertilized eggs.

PROPOLIS: Sealing materials collected by bees mainly out of plant gums. Also used to make the entrances smaller for the protection of the colony. It is transported to the hive using the hind legs.

ORIENTATION FLIGHT: flight made by the workers and queens to familiarize themselves with the land marks around the hives so that they do not get lost.

POLLEN: the brightly coloured powder produced abundantly by flowers, rich in protein, fat, minerals, vitamins. Good for rearing brood. Also important part of the diet for adult bees

ADVANTAGES OF BEE KEEPING

- 1) It requires little capital to start (depending on the size of the farm).
- 2) It does not take up valuable land or water body; it only occupies small portion of land.
- 3) There is no need for daily care since bees do not need daily attention so it allows time flexibility
- 4) Basic bee keeping techniques are very easy to learn and master
- 5) Equipment involved are made locally e.g bee-hive, bee smoker, bee dress, bee-veil, hive tool, honey presser.
- 6) Veterinary attention is not required.
- 7) It will increase the internal generated revenue for the centre.
- 8) It is a profitable venture.

All over the world, bee keeping is a serious economic pursuit practiced on a commercial scale. Any developing nation like Nigeria cannot afford to ignore this rewarding aspect of agriculture.

SETTING AN APIARY

The place where hive are placed is paramount to the beekeeper. If the interest is to increase honey yields and profit margin, 30 to 40 can be placed into the apiary for a start. African bees are defensive in nature, hence one must be kept away from the public or place where they cannot sting anyone. Bees require food sources that are nectar and pollen therefore they must be able to find

INTRODUCTION TO BEEKEEPING:

Beckeeping is an occupation of keeping and managing bees thereby harvesting the products, (Honey, bee wax propolis) etc for processing into various form for different uses, locally and for export.

In the olden days, bees live in hollow trees, rock crevice, a dark hidden space.

There they stored their food (pollen and honey) and also house the broad (egg, larva and pupae).

The modern technology through the research of some scientist, where the nature and behavior of bees were examined closely, it made beekeeping as profession easy. Anyone, old or young, can keep bees with profit. The labour involved in bee keeping light.

Bees can be kept at any place where there is sufficient bee pasture of shrubs fruit trees, orchards and cultivated crops.

Each nive, depending on it's size yield 10-25kg honey combs (about 50kg heer bottles) annually. In richer vegetation, a hive may yield 25-50kg honey combs.

The older colonies yield more than the newly settled ones. Ripe honey contains 18% water, 80% sugars (glucose and fructose), vitamins and minerals.

Honey has different colour, clearness, viscosity and taste are never the same depending on the season bee colony and the vegetation where it is raised.

Honey may be white or amber, sweet or bitter, fluid or granulated.

DEFINITION OF TERMS

APIARY: a place with at least one or more colonies.

HIVE: An Artificial shelter for the bees.

BEE COLONY: This is a complete biological unit and normally consist of one queen, thousand of workers, a few drones and combs which may consist of honey, pollen, and brood

COM8: A hanging sheet of wax with cells on both sides

HEE WAX: the building materials for combs produced in special glands of young bees.

business. In a case where there is insufficient capital and the business is finding it difficult to access funds from bank and investors; the entrepreneur must resolve to bootstrap financing, which is working with the limited cash, eliminating unnecessary expenses, establishing a credit line from suppliers and producing only on demand to avoid tying up resources.

11. Internal Fraudulent Activities

Bad employees can be a chief cause of failure of any business. When an illegal business transactions and cash siphoning is being carried out by employees at the expense of the business, that business is bound to face liquidation. So an entrepreneur must keep a keen eye on the activities of employees with respect to the business.

"There will be times when you will have to be abrasive, even brutal to members of your staff. Don't worry that your people will say bad things about you because of this. They already have. But in general, try to be pleasant and accommodating. Try to please the greatest number who work for you that you can; antagonize the fewest.

12. Lack of Entrepreneurial Skill

I will prefer to call this the ultimate reason why small businesses fail. When an entrepreneur lacks the necessary skills such as leadership skill, cash flow management, sales, persistence and self belief and so on; such an entrepreneur is bound to fail. An entrepreneur is the head and pilot of the business. Consider an airplane being flown by an inexperienced young pilot: The outcome can be better imagined.

In conclusion, these are the 12 chief reasons why small businesses fail. Having noted each one of them, you can strive to avoid them; while growing your business.

are computers, e-shops on the internet, automated accounting, e-payment and so on. Remember, trend is your friend, not your enemy.

5. Weak management

This is the fundamental reason why small businesses fail to survive. A standing rule in the business world is this:"The success or failure rate of any business is directly proportional to the strength and level of professionalism of the management."

From the first day of business, a very strong management is needed to ensure the survival of your business. You might say employing professionals such as attorneys and accountant is very expensive but they will do your business good in the long run. The speed at which your business grows is directly proportional to the overall strategy deployed on that business and

6. Fierce Competition

Most small business owners are afraid of competition because many profitable ventures have been forced to shut down due to fierce competition. I want to let you know that even if you are the inventor of an idea, that will not stop competitors from coming in. So your best bet is to keep an eye on your competitors, utilize every available innovative idea and make your customers happy. You can also implement some of the best protective firewalls to keeping your competitors at bay. These firewalls are: Trademarks, Patents and Copyright

7. Wrong Business Location

The location of a business is such an important factor that can never be over emphasized. If your business is located in an interior area than your competitor's, you are bound to fail. Factors to consider when choosing a business location are road network, nearness to high traffic zone, accessibility and patronage level of customers, population, demographics and so on. For example, imagine a business that sells motivational books located in brothel. What do you expect? Nothing, but outright failure.

8. Lack of Knowledge and Experience in the Chosen Field You can't succeed in a field where you have no knowledge and experience about. "Risk comes from not knowing what you are doing."

9. Bad Debt

When a business man gives much credit to the customers. That business is bound to fail. One key role of an entrepreneur is to keep an eagle eye on the cash flow. Since a business must never be short of cash and customers too must be kept loyal, the business owner must establish a certain credit limit and a fixed time from date of purchase to pay up.

"There is one paradoxical characteristic every entrepreneur must possess to succeed. An entrepreneur must be able to persuade his debtors to pay their debts promptly and at the same, must factically delay payments to his creditors."

10. insufficient Funds: Raising capital is the primary duty of an entrepreneur because cash flow is the life blood of business. Insufficient capital can kill even the most profitable

12 Strong Reasons Why Small Businesses Fail

Lack of Managerial Skill

When a small business owner lacks the managerial skill required to drive the business to greater heights, that business is bound to fail. Building a business without the necessary nanagerial skill in place is a futile adventure. An entrepreneur that wants to succeed must be able to effectively handle the employees, cash flow, production line and so on; or better still; the business owner must be able to hire a good manager to run the business.

2. Wrong Business Decisions

This is common to every human being irrespective of your field. Sometime ago a friend of mine, after carrying out critical analysis on a particular situation came up with a decision he considered favourable. But on implementing that decision, it back fired and at the end of the day, my friend had several lawsuits dangling on his neck. So whenever you have decided on an action to be implemented on your business, consider asking friends, business partners and professionals for advice. It is going to save you the stress of cleaning up the mess resulting from wrong business decision taken.

"Before making an important decision, get as much as you can of the best information available and review it carefully, analyze it and draw up worst case scenarios. Add up the plus or minus factors, discuss it with your team and do what your guts tell you to do." – The Mafia Manager

3. Harsh Government Fiscal, Economic and Monetary Policy

This is an open killer of both big and small businesses. As an entrepreneur, you must be on guard to bulletproof your business against the ever changing government fiscal and monetary policies. Since you cannot influence or alter the government's decisions, you must be ever prepared to swiftly adjust your business to prevent it from being hit by the adverse effect of unfavorable government policies. Instances of such government policies you must be on guard against are business taxes, double taxation, duties and levies, inflation, exchange rates and so on.

"How fast a company can respond in an emergency is a measure of its corporate reflexes." - Bill Gates

4. Inability to Move Swiftly With Trend and Changing Technology

It is obvious that some people hate change, some resist change while others embrace change. Change is constant, so it is either you align your business with the trend and ride to the top or you remain stagnant and eventually fold up. You also need to constantly upgrade your technological strengths as swiftly as possible. "Your greatest and most powerful business survival strategy is going to be the speed at which you handle the speed of change. As an entrepreneur, you must be on your toes sniffing the air for available trends and new technologies you can take advantage of. Examples of great industrial trends and technologies

- capital. This kind of result gives a project manager the opportunity to reset expectations based on real Feasibility studies that recommend against projects often cite a lack of human resources or financial the current resources available for a project and to estimate the need for additional resources Assessing Resources; Another of the advantages of feasibility studies is the opportunity to catalog
- legal roadblocks involving trademarks, patents, or other intellectual property rights. already over saturated with stronger competitors. Company leaders can also discover any potential 3. Marketing Feasibility; during the evaluation process, project managers learn whether the market is
- overruled by anxious stakeholders managers use a study as the basis for making timeline decisions, they run the least risk of being the timetable suggested by data generated by the study to help set milestones and deadlines. A quality feasibility study examines prospective timeline. When moving into a formal project planning phase, a project manager can use 4. Marking a Timeline; one of the biggest advantages of a feasibility study is the validation of a project sponsors for potential delays or breakdowns. When project

.lnvestment Decision making

Here are five steps to making better investment decisions:

- Choose a purely data-driven investment process
- Establish procedures to systematically review and improve your process.
- Focus on the process, not the results. If the process is good, good results will follow.
- Pocus on what could go wrong. A strong defence is the key to winning.
- good enough for you, it is not good enough for your clients Eat your own cooking. This one is really for investment managers. If your process 53 TOIL

Factors influencing Investment Decision making

influences a wide range of financial decisions. reaping future benefits. (Kane and Marcus 2005) There are various factors which affect the financial decision making of an individual of which risk tolerance is a crucial factor that An investment is the current commitment of money or other resources in the expectation of

process which is influenced by the risk tolerance of an individual. individual's perceived return and actual return. The mistake variables and risk tolerance. In reality it is observed that many a times there is a gap between Investment pattern of individuals and investment decisions are influenced by demographic lies in the decision making

providers and planners decision making has always been of great interest to researchers of the desire to appear socially acceptable. Understanding investment patterns and financial Research indicates that people tend to overestimate their actual level of risk tolerance because and financial service